

# **RV Safety Alarms Education Test**

**LP Gas Alarms / Detectors**

by

**MTI Industries, Inc.**

**SAFE  ALERT™**

# RV Safety Alarms Education Test

This Educational Test is designed to improve the knowledge of RV technicians as to the history and performance of safety alarms installed in RV's.

## Section: LP Gas Alarms / Detectors



Classic LP Gas Alarm  
Model 30-442WT

Propane gas leaks can potentially occur anywhere in the gas distribution system. Since Propane is heavier than air, leaks in the cabin of an RV can be detected by mounting a LP Gas alarm near the floor (4-20 inches off the floor).

# LP Gas Alarm Educational Test

## Question #1

When were LP Gas Alarms first required to be installed in new RV's with "gas appliances and electrical systems" by the RVIA?

- A. 1978
- B. 1985
- C. 1996
- D. 2000

# LP Gas Alarm Educational Test

## Question #1

When were LP Gas Alarms first required to be installed in new RV's with "gas appliances and electrical systems" by the RVIA?

- A. 1978
- B. 1985
- C. 1996 –required effective Sept. 1996. RV's manufactured prior to 1997 should have a LP Gas Alarm installed when serviced.
- D. 2000

# LP Gas Alarm Educational Test

## Question #2

Approximately how many RV's were manufactured between January 1985 and September 1996 – prior to the requirement to have a LP Gas Alarm installed?

- A. 1 Million
- B. 1.5 Million
- C. 2.0 Million
- D. 2.5 Million

# LP Gas Alarm Educational Test

## Question #2

Approximately how many RV's were manufactured between January 1985 and September 1996 – prior to the requirement to have a LP Gas Alarm installed?

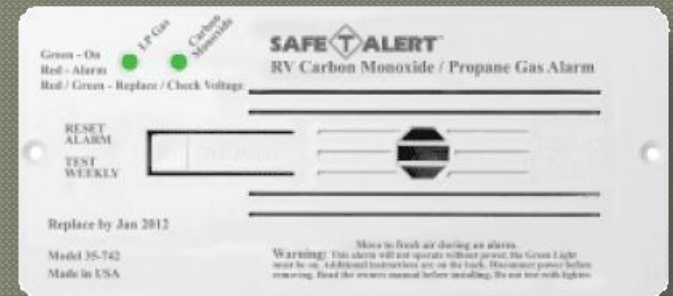
- A. 1 Million
- B. 1.5 Million
- C. 2.0 Million
- D. 2.5 Million – A majority of these RV's are still in use but did not have a LP Gas alarm installed when first sold. LP Gas Alarms should be installed during Service.

# LP Gas Alarm Educational Test

## Question #3

What is the service life of LP Gas Alarms installed in RV's?

- A. 1 Year
- B. 5 Years
- C. 10 Years
- D. Until they quit working.



**Dual CO / LP Gas Alarm  
Model 35-742**

# LP Gas Alarm Educational Test

## Question #3

What is the service life of LP Gas Alarms installed in RV's?

- A. 1 Year
- B. 5 Years – check the date code and replace any LP Gas Alarm over 5 years old.
- C. 10 Years
- D. Until they quit working.



# LP Gas Alarm Educational Test

## Question #4

Approximately how many RV's were manufactured between September 1996 and December 2008? The original LP Gas alarms installed in these RV's have reached the end of their service life and need to be replaced.

- A. 2.8 Million
- B. 3.0 Million
- C. 3.8 Million
- D. 4.2 Million



# LP Gas Alarm Educational Test

## Question #4

Approximately how many RV's were manufactured between September 1996 and December 2008. The original LP Gas Alarms installed in these RV's have reached the end of their service life and need to be replaced.

- A. 2.8 Million
- B. 3.0 Million
- C. 3.8 Million – Check the date code or replace by date, replace any LP Gas Alarm over 5 years old.
- D. 4.2 Million

# LP Gas Alarm Educational Test

## Question #5

In what year did Underwriters Laboratories (UL) stop allowing ON/OFF switches to be used in LP Gas Alarms?

- A. 1998
- B. 2000
- C. 2002
- D. 2004

# LP Gas Alarm Educational Test

## Question #5

In what year did Underwriters Laboratories (UL) stop allowing ON/OFF switches to be used in LP Gas Alarms?

- A. 1998
- B. 2000
- C. 2002
- D. 2004 – As of November 2004 ON/OFF control switches were disallowed. Any LP Gas alarm with an ON/OFF control switch should be replaced because the switch is a danger and the alarm is close to being 5 years old.

# LP Gas Alarm Educational Test

## Question #6

In what month of 2009 did CCI Controls, a long time manufacturer of LP Gas leak detectors cease operations?

- A. January
- B. February
- C. March
- D. April

# LP Gas Alarm Educational Test

## Question #6

In what month of 2009 did CCI Controls, a long time manufacturer of LP Gas leak detectors cease operations?

- A. January
- B. February – Safe-T-Alert (MTI Industries) manufacturers a replacement alarm for flush mount CCI Controls detectors. Model 30-442 fits the same cutout so enlarging the hole is not required.
- C. March
- D. April



# LP Gas Alarm Educational Test

## Question #7

When you replace a LP Gas detector that controls a gas valve you should also replace the solenoid?

- A. Yes
- B. No

# LP Gas Alarm Educational Test

## Question #7

When you replace a LP Gas detector that controls a gas valve you should also replace the solenoid?

- A. Yes – solenoids also wear out over time. If you are replacing a CCI controls valve control alarm with a Safe-T-Alert alarm you must always also replace the solenoid as the alarms and solenoids are not interchangeable, they require different operating voltages.
- B. No



# LP Gas Alarm Educational Test

## Question #8

LP Gas Alarms are installed on most Fleetwood RV models and come with 3 wires so the alarms could be connected to both battery supplies. Can I safely wire a Safe-T-Alert alarm to both batteries?

- A. Yes
- B. No

# LP Gas Alarm Educational Test

## Question #8

LP Gas Alarms are installed on most Fleetwood RV models and come with 3 wires so the alarms could be connected to both battery supplies. Can I safely wire a Safe-T-Alert alarm to both batteries?

- A. Yes
- B. No – Connect the Safe-T-Alert power lead to the house battery power lead. Cap or remove the remaining CCI Chassis lead.**

# LP Gas Alarm Educational Test

## Question #9

Testing LP Gas alarms with a butane lighter is a safe and easy method of checking the alarms performance?

- A. Yes
- B. No

# LP Gas Alarm Educational Test

## Question #9

Testing LP Gas alarms with a butane lighter is a safe and easy method of checking the alarms performance?

A. Yes – Pushing the test button only checks the alarms circuit with a simulated electronic gas detection not the sensor.

The sensor is supervised by the circuit in case of fault. The easiest method to test the sensor is by using a small amount of butane gas from a lighter . Caution should be used to only spray a small amount of the gas and then cover the detector until the alarm sounds. Note: LP Gas alarms have circuit delays it may take several seconds before the alarm sounds.

B. No

# LP Gas Alarm Educational Test

## Question #10

What % of the Lower Explosive Limit (LEL) of propane are LP Gas Alarms required to go into alarm before the gas reaches that level?

- A. 25%
- B. 50%
- C. 75%
- D. 100%



# LP Gas Alarm Educational Test

## Question #10

What % of the Lower Explosive Limit (LEL) of propane are LP Gas Alarms required to go into alarm before the gas reaches that level?

- A. 25% - LEL is the Percent of Propane gas in Air concentration at which the mixture will ignite. Alarms must sound prior to the gas mixture at the alarm reaching a still safe 25% of the explosive level.
- B. 50%
- C. 75%
- D. 100%

# LP Gas Alarm Educational Test

## Question #11

In a 2002 Journal of American Medical Association study what % of those aged 60 to 69 had Olfactory Impairment, trouble with smells and odors like LP gas?

- A. 8%
- B. 13%
- C. 17%
- D. 22%

# LP Gas Alarm Educational Test

## Question #11

In a 2002 Journal of American Medical Association study what % of those aged 60 to 69 had Olfactory Impairment, trouble with smells and odors like LP gas?

- A. 8%
- B. 13%
- C. 17.3% had problems with the smell test. For those aged 70-79 over 29% had problems smells and odors. Gas detectors were recommended for their homes and should be installed in their RV's if they don't have one.
- D. 22%



# LP Gas Alarm Educational Test

## Question #12

Dealers need to verify the LP Gas detector is operational prior to selling a used RV?

- A. Yes – Used RV's should be sold with LP Gas detectors that meet the latest safety standards and testing. Checking the date code, testing the alarm with a butane lighter and replacing alarms that are over five (5) years old should be part of the inspection / maintenance process prior to selling a used RV.
- B. No

# LP Gas Alarm Educational Test

## Review of Service Opportunities

- Over 2 million RV's built prior to 1996 may still be on the road without protection from LP Gas leaks. LP Gas Alarms should be installed.
- Another 3.8 million plus RV's built from 1996 to December 2008 could have LP Gas Alarms over 5 years old that should be replaced.
- CCI Controls has recently discontinued operations. MTI Industries / Safe-T-Alert brand LP Gas Alarms and Dual CO/LP Gas Alarms can be used as direct replacements.



# Drive Sales in Your Service Department!

## LP Gas Alarm



Flush Mount  
Model  
30-442-P-BR



Flush Mount  
Model  
30-442-P-WT

Recommended Replacement for  
**CCI CONTROLS**  
LP Gas Leak Detectors  
No Additional Modifications Required

Increase your parts and labor sales by checking the date codes on safety alarms during routine maintenance.

Replace if alarms are over 5 years old.

For more information contact

**MTI Industries:**

**(800) 383-0269**

**info@mtiindustries.com**

**SAFE T ALERT™**



Do your RV's safety  
need to be replaced?

The useful life of Propane alarms is 5 years. Smoke alarms have a 10 year useful life.

**Have a safe T.R.I.P.!**

TEST and inspect the Propane, CO and Smoke alarms installed in your RV every week and replace malfunctioning alarms.

REPLACE all Propane and CO alarms that are 5 years old or older and Smoke alarms that are 10 years old or older.

INSTALL Propane alarms listed to UL 1484 RV and CO alarms listed to UL 2034 RV.

PREVENT accidents by teaching family and friends about the operation of the alarms. Never ignore a sounding alarm.

**PROPANE & CO**  
Replace any F  
• Alarm is  
• Alarm fa

**SMOKE ALARM**  
Replace the S  
• Alarm is  
• Alarm fa

Have you rented or sold a RV with expired LP & CO alarms?

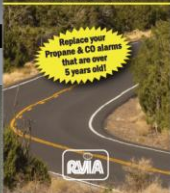
Check alarm date codes on your vehicles' LP & CO alarms. Replace any that are 5 years old or older.



The RVers choice for safety alarms!

Propane Alarms  
Carbon Monoxide Alarms  
Dual Propane/CO Alarms  
Smoke & Fire Alarms

www.Safe-T-Alert.com  
info@MTIIndustries.com  
1-800-383-0269



Sales tools available from MTI Industries for your use include:

- Point-of-Purchase safety center allows customer to “test drive” the product with attention getting displays

- Product brochures, flyers and posters

- MTI advertises in online and print industry publications

- Visit our dealer website for new materials: [www.mtidealer.com](http://www.mtidealer.com)